DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028331
Date Inspected: 04-Sep-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1930
Location: Job Site

CWI Name: Barry Drake and Salvador Merino

CWI Present:	☑ Yes	☐ No					
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

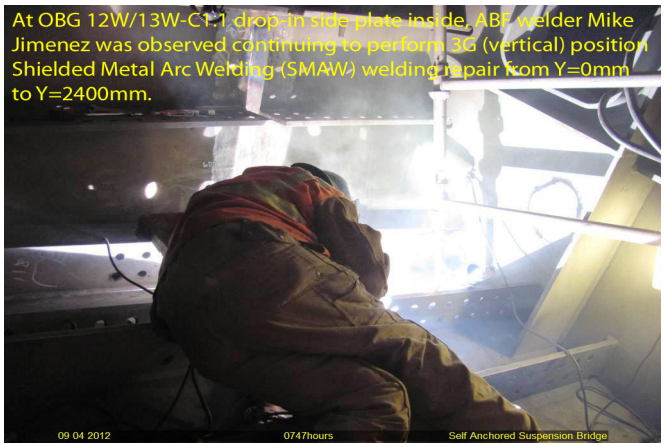
Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 12E-PP111.1-C1 drop-in side plate outside, QA randomly observed ABF/JV qualified welder Wai Kit Lai continuing to perform CJP groove welding repair at various locations Y=640mm, Y=725mm, Y=865mm, Y=1035 and Y=1070mm which were combined into one and Y=1240mm. These weld repairs are being repaired per Caltrans approved Request for Weld Repair (RWR) #201208-089. The welder was observed manually welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing Caltrans approved welding procedure ABF-WPS-D15-1004 Repair. The first time repairs which have cumulative length of 1050mm against total weld length of 2275mm were preheated to more than 225 degree Fahrenheit using Miller Proheat 35 Induction Heating System with the heater blanket put in place on one side of the weld joint prior/during excavation. During the shift, ABF QC Salvador Merino was noted monitoring the welder with measured working current of 116 amperes on the 3.2mm E7018H4R electrode and adjusted preheat temperature of 325°F during welding. The welder performed the Post Weld Heat Treatment (PWHT) of 450°F and held it for one (1) hour after welding as required where the weld repairs were completed. The following first time repairs were noted excavated and welded during the shift;

	Y-location	Length	Width	Depth	Remarks
1.	640mm	140mm	40mm	15mm	R1 - completed.
2.	725mm	90mm	30mm	15mm	R1 – completed.

3. 865mm 110mm 45mm 10mm R1 – completed.
4. 1035/1070mm 160mm 35mm 13mm R1 –combined/completed.
5. 1240mm 120mm 35mm 11mm R1 – excavated.

At OBG 12W/13W drop-in side plate C1.1 inside, QA randomly observed ABF/JV qualified welder Mike Jimenez continuing to perform CJP groove welding repair on a Seismic Performance Critical Member (SPCM) welded splice butt joint from Y=0mm to Y=2400mm per Caltrans approved Request for Weld Repair (RWR) # 201208-093. ABF personnel were noted using the Miller Proheat 35 Induction Heating System to preheat and maintain the required temperature of 325°F during welding. ABF welder Mike Jimenez was observed performing 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) welding repair on welded splice butt joint. The welder was noted using 4.0mm E7018H4R electrode implementing Caltrans approved welding procedure ABF-WPS-D15-1004 Repair. ABF QC Barry Drake was also noted monitoring the welder with measured working current of 180 amperes Mike Jimenez. With the absence of ABF welder Rick Clayborn, Mike Jimenez continued 3G SMAW repair welding by himself till the end of shift wherein he was able to complete the repair. The welder held the preheat of 450°F for one hour after welding as required for the Post Weld Heat Treatment (PWHT).



Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer